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Patents

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ow et al.

Serial No.: 09/121,152

Filed: May 6, 1994

For: BIOLOGICAL DE-INKING METHOD

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Art Unit: 1731

Examiner: Steve Alvo

DECLARATION OF HARALD SCHMID  
UNDER 37 CFR 8 1.132

HARALD SCHMID, declares as follows:

1. I earned an Engineer Diploma in 1992 from Munich University. My principal course of study was in Pulp and Paper Science. Subsequently, I have worked in the pulp and paper industry my entire career in Germany, Switzerland, and the United Kingdom. I am an expert in deinking chemistries in which I worked almost exclusively during, and shortly after, my time at Munich University.
2. My declaration is based on my scientific experience and understanding of the subject matter as an expert in the art. I am familiar with the invention described in the above-identified patent application regarding the novel use of deinking enzymes under non-alkali conditions.
3. I have reviewed the article contained in the Paper and Pulp International (PPI) publication entitled "Neutral Deinking Makes Its Debut," describing the breakthrough in October 1993 of deinking in neutral conditions, without the addition of alkalis such as sodium hydroxide to the pulp prior to or during deinking.
4. That publication refers to the use of deinking at neutral conditions at the Zwingen mill in Switzerland.
5. That mill is owned by Zwingen AG and is based in Zwingen, Switzerland. I was project manager at the Zwingen mill. I was directly involved with the design, construction, and early operation of their new deinking plant which began operation in

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May 1993.

6. The Zwingen mill deinks a variety of wastepaper grades using the floatation process. The Zwingen mill produces an assortment of paper grades including book paper, business form paper and photocopy based paper.

7. In 1992, I worked with the Zwingen mill owners to design the mill around a neutral deinking concept. It is my understanding and belief as one of skill and knowledge in the art at that time that the Zwingen mill was the first of its type in the world intended to be built and run on a neutral flotation deinking concept. There was no suggestion of non-alkali deinking at the Zwingen plant of which I was aware prior to 1992. The concept was tested and proven as effective in a pilot plant trial in 1992. The pilot plant trial created the proof to proceed with the design and the construction of the deinking plant in 1992, which concluded with the start up of the deinking plant in May of 1993.

8. The undersigned declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true and further that these statements are made under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

7.5.2004  
DATE  
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HARALD SCHMID